[illegible] 12

[illegible]: [illegible]

Redeveloped Edition | Class 9 Science | IESC Series

Original NCERT content reimagined with everyday life examples, creative AI-enhanced exercises, and interdisciplinary insights.

[illegible]

[illegible], [illegible]-[illegible] (bioluminescent) [illegible], [illegible], [illegible], [illegible], [illegible] — [illegible], [illegible]-[illegible], [illegible], [illegible]

[illegible], [illegible], [illegible], [illegible] (coral reef) [illegible]-[illegible], [illegible] **(biodiversity)**: [illegible]-[illegible], [illegible] — [illegible] — [illegible], [illegible]?

[illegible]: [illegible], [illegible], [illegible]

12.1 [illegible]

[illegible] — [illegible], [illegible], [illegible], [illegible], [illegible], [illegible], [illegible]

[illegible] — [illegible]: [illegible], [illegible], [illegible]-[illegible] ([illegible]), [illegible] ([illegible])[illegible]

> **[illegible]: [illegible]**
>
> [illegible], [illegible] — [illegible] — [illegible] (endemic) [illegible] ([illegible]) [illegible], [illegible]

12.2 [illegible]?

[illegible], [illegible] ([illegible] 12.9 [illegible]) [illegible], [illegible] **(evolution)** [illegible] — [illegible], [illegible], [illegible], [illegible], [illegible] — [illegible], [illegible], [illegible]

12.3 [illegible]

[illegible], [illegible] — [illegible] **(classification)** [illegible]

12.3.1 [illegible]

[illegible], [illegible]:

- [illegible] — [illegible] (nucleus) [illegible] ([illegible]) [illegible] ([illegible])?
- [illegible] — [illegible]?
- [illegible] — [illegible] ([illegible]/autotrophic) [illegible] ([illegible]/heterotrophic)?
- [illegible] — [illegible], [illegible], [illegible]?
- [illegible] — [illegible], [illegible], [illegible]

[illegible] — [illegible]: [illegible]

[illegible]: [illegible]

[illegible]:

1. [illegible] ([illegible]) — [illegible], [illegible], [illegible], [illegible]
2. [illegible]: [illegible], [illegible], [illegible]? [illegible]? [illegible]?
3. [illegible]
4. [illegible] — [illegible]? [illegible]

12.4 [illegible]

[illegible], [illegible]:

- [illegible]

- [illegible] ([illegible] genus [illegible])[illegible]
- [illegible] — [illegible]
- [illegible] — [illegible]-[illegible]

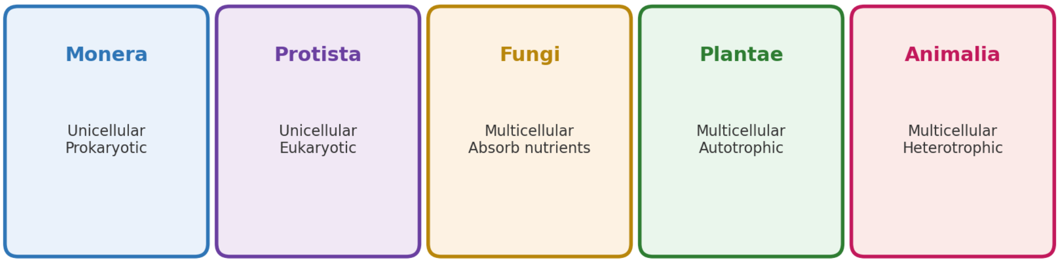
> [illegible]: [illegible] "[illegible]" [illegible]
>
> [illegible], [illegible] "[illegible]" [illegible] — [illegible], [illegible] *Mycobacterium tuberculosis* ([illegible]/TB [illegible]) [illegible] *Vibrio cholerae* ([illegible])[illegible] — [illegible], [illegible]

12.5 [illegible]

[illegible]-[illegible], [illegible], 18 [illegible], [illegible]-[illegible] **(two-kingdom)** [illegible] — Plantae [illegible] Animalia — [illegible], [illegible], [illegible] "[illegible]" [illegible] "[illegible]" [illegible] 1969 [illegible], [illegible] **[illegible]-[illegible] (five-kingdom)** [illegible] — [illegible], [illegible], [illegible], [illegible], [illegible] — [illegible], [illegible], [illegible], [illegible]

12.6 [illegible]

Fig 12.1 — Whittaker's Five Kingdom Classification



Classified by: cell structure (nucleus?) → body organisation (uni/multicellular?) → mode of nutrition

[illegible] 12.1 — [illegible], [illegible]

12.6.1 [illegible] — [illegible]

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12.6.2 □□□ □□□□□□□□□□□

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12.6.3 □□□ □□□□□ (Fungi)

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12.6.4 □□□ □□□□□□□ (Plantae)

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12.6.5 □□□ □□□□□□□□□ (Animalia)

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Escherichia coli	□□□□□□□□□, □□□ □□□□□□□ □□□□	□□□□□□
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[illegible] — [illegible]: [illegible]-[illegible]

[illegible]: [illegible], [illegible], [illegible], [illegible]-[illegible] ([illegible]) [illegible] — [illegible] ([illegible], [illegible]!) [illegible] "[illegible]" [illegible]।

12.7 [illegible]

[illegible]-[illegible] [illegible]-[illegible] [illegible] — [illegible] ([illegible]) [illegible]; [illegible], [illegible]; [illegible], [illegible]-[illegible] **(adaptations)** [illegible]: [illegible]।

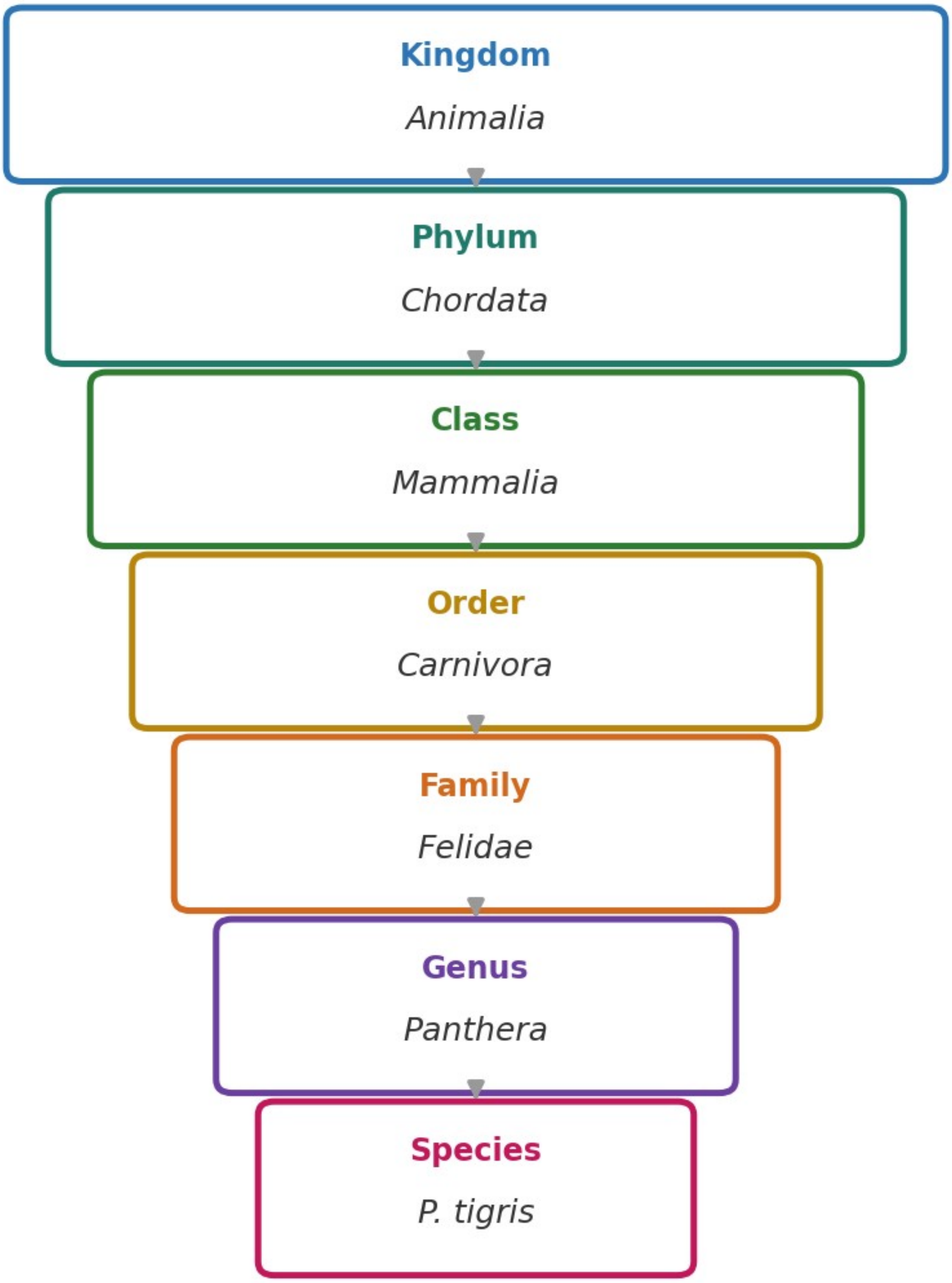
12.7.1 [illegible]

[illegible] — [illegible], [illegible]:

[illegible] → [illegible] (Phylum) → [illegible] (Class) → [illegible] (Order) → [illegible] (Family) → [illegible] (Genus) → [illegible] (Species)

[illegible], [illegible]-[illegible] [illegible] ([illegible] → [illegible] → [illegible] → [illegible] → [illegible]) [illegible], [illegible]।

Fig 12.2 — Tiger's Classification Hierarchy



[illegible] 12.2 — [illegible], [illegible]

□ [illegible]: [illegible] "[illegible]"

[illegible] 12.2 [illegible]: [illegible] Animalia ([illegible]), [illegible] Chordata, [illegible] Mammalia ([illegible]), [illegible] Carnivora ([illegible]), [illegible] Felidae ([illegible]), [illegible] *Panthera* ("[illegible]", [illegible]), [illegible] *tigris* — [illegible], [illegible]

12.8 [illegible] — [illegible]

[illegible] *[illegible]*, [illegible] *[illegible]*, [illegible] "[illegible]", [illegible] *tigre* [illegible]-[illegible], [illegible] **(binomial nomenclature)** [illegible] — [illegible]-[illegible], [illegible] 18 [illegible]: [illegible] **(genus)** [illegible], [illegible] **(species)**[illegible]

[illegible]	[illegible]
[illegible]	*Panthera tigris*
[illegible]	*Panthera leo*
[illegible]	*Mangifera indica*
[illegible]	*Homo sapiens*

[illegible], [illegible] **(italic)** [illegible] ([illegible]), [illegible], [illegible]

[illegible]: [illegible] — [illegible] (taxonomy) [illegible]

[illegible] (1707–1778) [illegible], [illegible]-[illegible] 1758 [illegible], *Systema Naturae*, [illegible], [illegible] — [illegible], [illegible] — 260 [illegible], [illegible]

□ [illegible] — [illegible]: [illegible]

[illegible]: [illegible] ([illegible]) [illegible] — [illegible], [illegible], [illegible] ([illegible]), [illegible] ([illegible]), [illegible], [illegible], [illegible]-[illegible], [illegible]-[illegible] ([illegible]) [illegible]

12.9 [illegible]

[illegible] **(fossils)** — [illegible], [illegible] (sedimentary rock) [illegible] — [illegible], [illegible], [illegible]

[illegible]: [illegible]

[illegible], [illegible], [illegible], [illegible], [illegible] — [illegible]

12.10 [illegible]

[illegible], [illegible] ([illegible]) [illegible]: [illegible], [illegible], [illegible], [illegible], [illegible], [illegible], [illegible] — [illegible], [illegible]

[illegible]: [illegible]

1973 [illegible], [illegible], [illegible] — [illegible], [illegible], [illegible], [illegible] "[illegible]" (flagship species) [illegible], [illegible], [illegible], [illegible] — [illegible] "[illegible] (umbrella species)" [illegible]

[illegible]

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible], [illegible], [illegible], [illegible]	[illegible]

[illegible]	[illegible]	[illegible]
[illegible]	[illegible], [illegible], [illegible], [illegible], [illegible]	[illegible]
[illegible]	[illegible] → [illegible] → [illegible] → [illegible] → [illegible] → [illegible] → [illegible]	[illegible] "[illegible]"
[illegible]	[illegible]-[illegible]: [illegible] + [illegible]	*Panthera tigris, Mangifera indica*
[illegible]	[illegible], [illegible]	[illegible], [illegible]
[illegible]	[illegible], [illegible], [illegible], [illegible]	[illegible]

[illegible], [illegible], [illegible] — [illegible]

[illegible]

1. [illegible]
2. [illegible]
3. [illegible], [illegible]: [illegible], [illegible], [illegible], [illegible], [illegible], [illegible], [illegible]

[illegible]

1. [illegible], [illegible], [illegible]-[illegible], [illegible]?
2. [illegible]
3. [illegible]-[illegible] [illegible]?

[illegible]

1. **[illegible]:** [illegible] "[illegible]" [illegible]
2. **[illegible]:** [illegible], [illegible], [illegible]
3. **[illegible]-[illegible]:** [illegible] ([illegible], [illegible], [illegible], [illegible]) [illegible], [illegible]-[illegible] [illegible]
4. **AI [illegible] — [illegible]:** [illegible]-[illegible], [illegible], [illegible], [illegible], [illegible]? [illegible]

[illegible] — [illegible]

[illegible] A: [illegible]

[illegible]-[illegible] ([illegible], [illegible], [illegible]) [illegible], [illegible]-[illegible] — [illegible], [illegible], [illegible], [illegible]-[illegible]

[illegible] B: [illegible]

[illegible], [illegible]-[illegible] ([illegible], [illegible], [illegible], [illegible]) [illegible], [illegible]-[illegible]?

[illegible] C: [illegible]

[illegible] — [illegible]/DNA-[illegible]-[illegible], [illegible]-[illegible]-[illegible] DNA [illegible]-[illegible], [illegible]

[illegible]! [illegible], [illegible], [illegible], [illegible]-[illegible]